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form a treated waste product having an improved environmental, health and/or animal performance property, wherein n is from 0 to 10, and m is from 0 to 12.

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9. --The method of Claim 1, wherein the treatment amount is effective to reduce at least one of acid rain, atmospheric nitrogen loading and particulate matter less than 10 microns associated with the manure.--
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REMARKS

Claims 1-27 remain pending in the application.

Claim 1 has been amended to facilitate prosecution and to more particularly define the Claimed invention by introducing the language, "wherein the manure solids are present within a dry animal litter composition." Support for this amendment can be found in the specification on page 7, lines 20 – 29, and in Example 3. As such, no new matter has been introduced by this amendment.

Claim 9 has been amended to facilitate prosecution, e.g., to spell out the abbreviation "PM-10s" at its first occurrence. Support for this amendment can be found on page 3, lines 18-19 of the specification. As such, no new matter has been introduced by the amendment.

I. Rejections under 35 U.S.C. § 112

Claims 1-11, 14-17, and 20-27 are rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness for the following reasons. Specifically, the Examiner alleges that it is unclear what the qualitative "treatment" is, thus, when or what an effective amount is, and what is "effective," effective for.

The phrase "effective amount" is defined in the specification at page 7, lines 12-19, as the amount of a compound or property capable of performing the function of the compound or property for which an effective amount is expressed. An exact effective amount will vary

depending on the variables and processing conditions. However, an appropriate effective amount may be determined by one of ordinary skill in the art using only routine experimentation. From a qualitative standpoint, effective treatment means that the desired results are obtained upon effective treatment of the animal manure with the claimed composition. For example, an effective treatment of animal manure with the claimed composition provides a treated waste product having and improved environmental, health and/or animal performance property, such as a reduction in phosphorus solubility in manure; the reduction of phosphorus runoff and/or phosphorus leaching from fields fertilized with the manure; and the inhibition of ammonia volatilization from the manure.

The Examiner further alleges that the term "PM-10's" is unclear as it is not spelled out at first appearance. While Applicant does not concede the Examiner's position, this rejection is rendered moot by the amendment to Claim 9 submitted herewith.

II. Rejections over U.S. Patent No. 5,589,164 (hereinafter "Cox")

A. 35 U.S.C. § 102(b)

Claims 1-14, 16, 18-23 and 26-27 are initially rejected under 35 U.S.C. §102(b) as allegedly being anticipated by the Cox patent. Applicant respectfully traverses the rejection.

It is well established that in order for the prior art of record to be a novelty defeating reference under 35 U.S.C. §102(b), the prior art reference must disclose each and every feature of the claimed invention. Here, such a standard has not been met.

As amended, Claim 1 of the instant application recites, in part, a method for treating animal manure solids, wherein the manure solids are **present within a dry animal litter composition**, comprising contacting the solids with an effective treatment amount of a treatment composition. In contrast, the disclosure of Cox only discloses the treatment of **municipal sewage in a liquid form**. More specifically, attention is drawn to Example II, (col. 28, ln. 40) which forms the basis for the Examiner's rejection. While Example II mentions treatment of

“brown dirt-like” municipal sewage (MSW), it clearly states that prior to the treatment, the MSW is first **dispersed in water** to emulate the sewage as it would be transferred through a sewage line (See col. 28, ln. 52). To that end, Cox is silent with regard to the treatment of sewage that is **not** first dispersed in water, much less animal manure solids present in a dry animal litter composition.

Therefore, instant Claim 1 and those claims depending therefrom differ from Cox at least by the fact that Cox only discloses the treatment of sewage in a liquid form and **not** the treatment of manure solids present in a dry animal litter composition. As such, Cox fails to disclose each and every feature of the claimed invention and such rejection should be withdrawn.

B. 35 U.S.C. § 103(a)

In a second rejection over Cox, the examiner has further alleged that Claims 1-23, 26 and 27 are rendered obvious under 35 U.S.C. §103(a). Once again, Applicant respectfully traverses this rejection.

It is well settled that in order to establish a *prima facie* case of obviousness, the art of record must teach, or at least suggest, the claimed invention as a whole. Moreover, there must be adequate motivation and a reasonable expectation of success to undertake the modifications proposed in the rejection. Once again, neither standard has been met.

As stated above, Cox only discloses the treatment of sewage in a liquid form, whereas Claim 1 of the instant application is directed to the treatment of animal manure **solids**, wherein the manure solids are **present within a dry animal litter composition**. As such, Cox fails to teach or even suggest the Claimed invention as a whole. Moreover, one of ordinary skill in the art would not have been motivated in view of Cox’s clear teaching to disperse the municipal sewage in water, to arrive at the method of the instant Claim. Therefore, it is respectfully submitted that the disclosure of Cox does not render Claim 1, and those claims depending therefrom, obvious, and such rejection should be withdrawn.

III. Rejections over disclosure of Bushee, *et al.*

The Examiner has further rejected Claims 1-5, 8-14, 16, 18-22 and 26 under 35 U.S.C. 102(b) as allegedly being anticipated by Bushee, et al. Applicant respectfully disagrees with this rejection.

As previously set forth, Claim 1 of the instant invention recites a method for treating animal manure solids, wherein the solids are present within a dry animal litter composition. In contrast, Bushee only discloses the treatment of swine manure that was collected in a collection tray located below the swine feeding crates and thoroughly mixed with water prior to being treated. Therefore it is evident from the disclosure of Bushee that the manure actually treated was mixed with water and was **not** animal manure solids present within a dry animal litter composition.

Moreover, in view of Bushee's direction to treat swine manure that is thoroughly mixed with water, it follows that one of ordinary skill in the art would not have been motivated in view thereof to arrive at a method for treating animal manure solids that are present within a dry animal litter composition. Therefore, Bushee similarly fails to disclose each and every feature of the claimed invention and such rejection should be withdrawn.

IV. Obvious Type Double Patenting

Finally, the Examiner has also rejected Claims 1-27 of the instant application under the judicially created doctrine of obvious-type double patenting over Claims 1-22 of U.S. Patent No. 6,346,240 (hereinafter the "Moore" patent).

While Applicant submits that the Office Action has failed to establish a *prima facie* case of obviousness over the Claims of the Moore patent, Applicant nonetheless respectfully requests that the obviousness-type double patenting rejections be held in abeyance until patentable subject matter is identified.

CONCLUSION

In view of the Amendments and Remarks set out above, it is respectfully asserted that the rejections set out in the April 18, 2002 Office Action have been overcome and that the application is in condition for allowance. Therefore, Applicant respectfully seeks notification of the same.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version With Markings to Show Changes Made."

A credit card payment form in the amount of \$920.00 is also enclosed for the requisite Three Month Extension of Time fee. No additional fee is believed due; however, the Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

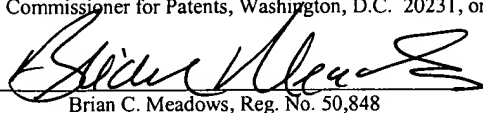


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CERTIFICATE OF MAILING

I hereby certify that this AMENDMENT is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on the dated indicated below.


Brian C. Meadows, Reg. No. 50,848

10-18-02
Date

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 1 and 9 have been amended as follows:

1. -- A method of treating animal manure solids, wherein the manure solids are present within a dry animal litter composition, comprising contacting the solids with an effective treatment amount of a treatment composition comprising $\text{AlCl}_3 \cdot n\text{H}_2\text{O}$ or $\text{Al}(\text{NO}_3)_3 \cdot m\text{H}_2\text{O}$, or the residue of $\text{AlCl}_3 \cdot n\text{H}_2\text{O}$ or $\text{Al}(\text{NO}_3)_3 \cdot m\text{H}_2\text{O}$, to form a treated waste product having an improved environmental, health and/or animal performance property, wherein n is from 0 to 10, and m is from 0 to 12.
9. --The method of Claim 1, wherein the treatment amount is effective to reduce at least one of acid rain, atmospheric nitrogen loading and [PM-10s] particulate matter less than 10 microns associated with the manure.--